

ADDITIONS TO THE CATALOG OF OHIO
VASCULAR PLANTS FOR 1929.*

JOHN H. SCHAFFNER.

The additions to the State Herbarium have been both numerous and important, many showing decided extensions of known ranges and others adding species new to the list. Dr. F. W. Pennell has completed his monograph of the North American species of *Agalinis* and our list is now corrected in agreement with his determinations. Dr. E. T. Wherry has studied our species of *Phlox*. Thus we are learning not only what we have but the exact localities where botanists can find the plants. Our specimens of *Helianthus* were all studied by Prof. Elba E. Watson of the Michigan Agricultural College and a revised list of the species is presented below, corresponding to his recently published work—Contributions to a Monograph of the Genus *Helianthus*. Mich. Acad. Sci. Arts and Letters 9:305–475. 1929. The study of a genus by a specialist nearly always brings improvement and change which means progress. Change brings temporary inconvenience, but the individual must necessarily be readjusting himself to an advancing world, in plant taxonomy and geography as well as in all other progressive sciences.

4. *Botrychium lanceolatum* (Gmel.) Angs. Lanceleaf Grape-fern. "Common in Beech-Maple woods in Western half of Monroe Twp.," Ashtabula Co. Lawrence E. Hicks.
20. *Asplenium pinnatifidum* Nutt. Pinnatifid Spleenwort. Buchtel, Athens Co. Len Stephenson.
26. *Asplenium montanum* Willd. Mountain Spleenwort. "Abundant on all of the cliffs on east side of gulch." White's Gulch, Liberty Twp., Jackson Co. Laurel Twp., Hocking Co. Floyd Bartley and Leslie L. Pontius.
40. *Dennstaedtia punctilobula* (Mx.) Moore. Boulder-fern. Red Hills region, along Duncan Run, Genoa Twp. and Highbanks, Liberty Twp., Delaware Co. R. B. Gordon and F. B. Chapman.
47. *Azolla caroliniana* Willd. Carolina Azolla. "Abundant in the north end of Baumgardner's Lake," Jackson Twp., Franklin Co. Arthur R. Harper. (This was planted there in the spring of 1929 by Lawrence E. Hicks.—J. H. S.) Portage Lakes, near Akron, Summit Co. Glenn W. Blaydes.
53. *Equisetum laevigatum* A. Br. Smooth Scouring-rush. Licking Narrows, Toboso, Licking Co. R. B. Gordon and Hiram F. Thut. Big Darby Creek, Prairie Twp., Franklin Co. R. B. Gordon.

*Papers from the Department of Botany, The Ohio State University, No. 255.

54. *Equisetum fluviatile* L. Water Horsetail. Bennett Lake, Washington Twp., Holmes Co. Also in Long Pond, Coventry Twp., Summit Co.; Muzzy Lake, Rootstown Twp., Portage Co.; and Black Run Pond, Mentor Twp., Lake Co. Lawrence E. Hicks. Indian Lake, Logan Co. W. H. Camp.
59. *Lycopodium porophyllum* Lloyd & Und. Rock Club-moss. Hocking Twp., Fairfield Co. L. E. Hicks and E. S. Thomas. Ofer Hollow, Jackson Co. Floyd Bartley and Leslie L. Pontius.
61. *Lycopodium clavatum* L. Common Club-moss. Toboso, Licking Co. R. B. Gordon and Hiram F. Thut. Corning, Perry Co. R. D. Book.
69. *Pinus rigida* Mill. Pitch Pine. Colerain Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
70. *Pinus virginiana* Mill. Scrub Pine. Byington, Mifflin Twp., Pike Co. Reported by E. S. Thomas.
71. *Pinus echinata* Mill. Short-leaf Yellow Pine. Colerain Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
76. *Taxus canadensis* Marsh. American Yew. Put-in-Bay (South Bass) Island, Ottawa Co. R. C. Osburn and L. H. Tiffany.
92. *Potamogeton lucens* L. Shining Pondweed. Baumgardner's Pond, Jackson Twp., Franklin Co. Hiram F. Thut.
100. *Potamogeton pusillus* L. Small Pondweed. Baumgardner's Pond, Jackson Twp., Franklin Co. Hiram F. Thut.
121. *Typha angustifolia* L. Narrow-leaf Cat-tail. Jerusalem Twp., Lucas Co. Louis W. Campbell. Oak Hill, Jackson Co. Conrad Roth. Near Columbus, Franklin Co. R. B. Gordon and H. F. Thut.
130. *Lemna cyclostosa* (Ell.) Chev. Valdivia Duckweed. Mentor Twp., Lake Co. L. E. Hicks.
132. *Wolffella floridana* (J. D. Smith) Thomp. Florida Wolffella. Green Twp., Summit Co.; Suffield Twp., Portage Co. L. E. Hicks.
133. *Wolffia columbiana* Karst. Columbia Wolffia. Collected in Ross, Licking, Richland, Summit, Portage, and Lake Counties by L. E. Hicks.
134. *Wolffia punctata* Griseb. Punctate Wolffia. Near Fredericktown, Knox Co. L. E. Hicks.
138. *Cyperus inflexus* Muhl. Awned cyperus. Abundant in ooze at north end of Baumgardner's Lake, Jackson Twp., Franklin Co. Arthur R. Harper.
- 139.2. *Cyperus retrofractus* Torr. Rough Cyperus. Benton Twp., Hocking Co. Floyd Bartley.
176. *Rhynchospora glomerata* (L.) Vahl. Clustered Beak-rush. Liberty Twp., Ross Co. Floyd Bartley and Leslie L. Pontius. Silver Lake, near New Carlisle, Clark Co. John H. Schaffner.
181. *Scleria verticillata* Muhl. Low Nut-rush. Silver Lake, near New Carlisle, Clark Co. John H. Schaffner; Ira May Swamp, Wayne Twp., Pickaway Co. Leslie L. Pontius and Floyd Bartley.
201. *Carex trisperma* Dew. Three-fruited Sedge. Hillsboro, Highland Co. Katie M. Roads.
223. *Carex leptalea* Wahl. Bristle-stalked Sedge. Hillsboro, Highland Co. Katie M. Roads.
227. *Carex hirtifolia* Mack. Pubescent Sedge. Hillsboro, Highland Co. Katie M. Roads.
278. *Carex folliculata* L. Long Sedge. "Abundant in swamps," Wayne Twp., Ashtabula Co. Lawrence E. Hicks.
340. *Eragrostis capillaris* (L.) Nees. Capillary Love-grass. Hillsboro, Highland Co. Katie M. Roads.
345. *Korycarpus arundinaceus* Zea. American Korycarpus. Jefferson Twp., Adams Co. Conrad Roth.
349. *Phragmites phragmites* (L.) Karst. Common Reed-grass. Silver Lake, near New Carlisle, Clark Co. John H. Schaffner. Also near Lancaster, Fairfield Co. Glenn W. Blaydes.
352. *Arrhenatherum elatius* (L.) Beauv. Oat-grass. Bexley, Franklin Co. E. S. Thomas.
353. *Trisetum pennsylvanicum* (L.) Beauv. Marsh False-oats. "In a swamp near Hillsboro." Liberty Twp., Highland Co. Katie M. Roads.

359. *Nothololcus lanatus* (L.) Nash. Velvet-grass. South Perry, Hocking Co. E. S. Thomas. Also Loudonville, Ashland Co. Glenn W. Blaydes. Conneaut Twp. and Monroe Twp., Ashtabula Co. Lawrence E. Hicks.
372. *Hordeum vulgare* L. Common Barley. "Escaped along roadside," Fredericktown, Knox Co. Lawrence E. Hicks.
- 372a. *Hordeum vulgare trifurcatum* Schlecht. Hooded Barley. "Escaped along roadside," Fredericktown, Knox Co. Lawrence E. Hicks.
383. *Sporobolus asper* (Mx.) Kunth. Long-leaf Rush-grass. Minerva Park, Franklin Co. R. B. Gordon and F. M. Chapman. Earlier specimens in the herbarium are from "Steelton," "Sellsville," in Columbus.
403. *Muhlenbergia umbrosa* Scribn. Wood Muhlenbergia. "In woodland," East Williamsfield, Ashtabula Co. Lawrence E. Hicks.
410. *Aristida dichotoma* Mx. Poverty-grass. "In woodland," East Williamsfield, Ashtabula Co. Lawrence E. Hicks.
- 415a. *Phalaris arundinacea picta* L. Ribbon-grass. "Escaped along roadside near Kelloggville," Ashtabula Co. Lawrence E. Hicks.
455. *Echinochloa walteri* (Pursh) Nash. Marsh Cockspur-grass. Williamsfield Twp., Ashtabula Co. Lawrence E. Hicks.
464. *Zizania aquatica* L. Wild Rice. "Old canal bed," Wayne Twp., Pickaway Co. Floyd Bartley and Leslie L. Pontius.
- 469.1. *Andropogon elliotii* Chapm. Elliott's Beard-grass. Near New Straitsville, Perry Co. Lawrence E. Hicks, Edward S. Thomas and Len. Stephenson.
475. *Lilium superbum* L. Turk's-cap Lily. Jackson Twp., Pickaway Co. Leslie L. Pontius and Floyd Bartley.
477. *Lilium philadelphicum* L. Philadelphia Lily. Shawnee State Forest, Scioto Co. R. B. Gordon and Conrad Roth.
- 481.2. *Nothoscordum bivalve* (L.) Britt. False Garlic. Greenbrier Twp., Adams Co. E. Lucy Braun. (Braun Herbarium).
482. *Allium tricoccum* Ait. Wild Leek. "In woods along Conneaut R." Farnham, Ashtabula Co. Lawrence E. Hicks.
- 487.1. *Scilla nonscripta* Hoff. & Link. Common Blue Squill. "Spreading in a vacant lot." Hillsboro, Highland Co. From western Europe. Kate M. Roads.
- 487.2. *Scilla sibirica* Andr. Siberian Squill. From Russia and Siberia. Propagates itself from seed and spreads when planted about dwellings. Columbus, Franklin Co. John H. Schaffner.
511. *Disporum lanuginosum* (Mx.) Nich. Hairy Disporum. Harrison Twp., Ross Co. Floyd Bartley.
519. *Clintonia umbellulata* (Mx.) Torr. White Clintonia. Abundant, East Pike Run, Salt Creek Twp., Hocking Co. Floyd Bartley and Leslie L. Pontius.
532. *Tradescantia pilosa* Lehm. Zigzag Spiderwort. Paint Creek Gorge, Ross Co. Floyd Bartley and Leslie L. Pontius. "Common in woodlands," Twin Twp., Preble Co. Lawrence E. Hicks.
542. *Juncus marginatus* Rostk. Grass-leaf Rush. Wayne Twp., Ashtabula Co. Lawrence E. Hicks.
544. *Juncus articulatus* L. Jointed Rush. Silver Lake, near New Carlisle, Clark Co. John H. Schaffner.
545. *Juncus torreyi* Cov. In pond near Columbus, Franklin Co. R. B. Gordon and H. F. Thut.
547. *Juncus brachycephalus* (Engelm.) Buch. Small-headed Rush. Liberty Twp., Highland Co. Katie M. Roads.
553. *Xyris flexuosa* Muhl. Slender Yellow-eyed-grass. Springfield Twp., Lucas Co. Louis W. Campbell.
558. *Iris cristata* Ait. Crested Dwarf Iris. Pure white form. East Pike Run, Hocking Co. Floyd Bartley.
- 556.3. *Iris virginica* L. Virginia Blue-flag. All of our Blue-flags, which have heretofore gone under the name of *Iris versicolor*, belong to this species, except one specimen. Generally distributed in the state in suitable habitats from Williams, Hamilton (Edgar Anderson) and Greene counties north-eastward to Cuyahoga (Edgar Anderson) and Perry. Conneaut R., Conneaut Twp., Ashtabula Co. L. E. Hicks.

557. *Iris versicolor* L. Northern Blue-flag. According to the study of Edgar Anderson, all of our Blue-flags, which have heretofore gone under the name of *Iris versicolor*, belong to the preceding number. This species probably only occurs in north-eastern Ohio. The only specimen in the herbarium is from Ashtabula county. Also new specimen from Conneaut R., Conneaut Twp., Ashtabula Co. L. E. Hicks.

ORDER SCITAMINALES.

Cannaceæ. Canna Family.

- 563.2. *Canna generalis* Bail. Common Canna. Spontaneous from seed; surviving only for the season. Columbus, Franklin Co. John H. Schaffner.
567. *Fissipes acaule* (Ait.) Small. Moccasin-flower. White's Gulch, Liberty Twp., Jackson Co. Floyd Bartley and Leslie L. Pontius.
577. *Blephariglotis lacera* (Mx.) Farw. Ragged Fringed-orchis. Springfield Twp., Lucas Co. Louis W. Campbell.
580. *Blephariglotis peramoena* (Gr.) Rydb. Fringeless Purple Orchis. Pee Pee Twp., Pike Co., White's Gulch, Jackson Co., Higby Prairie, Ross Co. Floyd Bartley and Leslie L. Pontius.
582. *Isotria verticillata* (Willd.) Raf. Whorled Isotria. Ofer Hollow, Jackson Co. Floyd Bartley and Leslie L. Pontius. "Neotoma," Good Hope Twp., Hocking Co. E. S. Thomas.
585. *Limodorum tuberosum* L. Limodorum. Shawnee State Forest, Scioto Co. Roscoe Franks and Conrad Roth.
588. *Ibidium cernuum* (L.) House. Nodding Lady's-tresses. Liberty Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
593. *Peramium pubescens* (Willd.) MacM. Downy Rattlesnake-plantain. Big Darby Creek, Franklin Co. E. S. Thomas.
594. *Malaxis unifolia* Mx. Green Addermouth. Rock Hill, Colerain Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
596. *Liparis loeselii* (L.) Rich. Fen Twayblade. "In a swamp" near Hillsboro, Highland Co. Katie M. Roads. Cranberry Island, Buckeye Lake, Licking Co. Lawrence E. Hicks.
599. *Corallorrhiza corallorrhiza* (L.) Karst. Early Coral-root. Cantwell Cliffs, Hocking Co. Glenn W. Blaydes.
604. *Magnolia tripetala* L. Umbrella Magnolia. Byers Hollow, Saltcreek Twp., Hocking Co., also Byers Hollow, Eagle Twp., Vinton Co. Floyd Bartley and Leslie L. Pontius.
608. *Ranunculus micranthus* Nutt. Rock Crowfoot. "In two woods and along small stream." Liberty Twp., Highland Co. Katie M. Roads.
612. *Ranunculus bulbosus* L. Bulbous Buttercup. "Abundant in a lawn; introduced in grass seed." Hillsboro, Highland Co. Katie M. Roads.
626. *Nigella damascena* L. Love-in-a-mist. Escaped. Columbus, Franklin Co. Mrs. W. H. Camp.
634. *Anemone cylindrica* Gr. Long-fruited Anemone. Springfield Twp., Lucas Co. Louis W. Campbell.
648. *Isopyrum biternatum* (Raf.) T & G. False Rue-anemone. Williamsport, Ross Co. Leslie L. Pontius.
652. *Parnassia caroliniana* Mx. Carolina Grass-of-Parnassus. North Union Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
- 657.1. *Berberis thunbergii* DC. Japansee Barberry. Escaped in swamp woods, Delaware, Delaware Co. G. W. Blaydes.
664. *Drosera intermedia* Hayne. Spatulate Sundew. Springfield Twp., Lucas Co. Also in Spencer Twp. Louis W. Campbell.
677. *Capnoides sempervirens* (L.) Borck. Pink Corydalis. Spencer Twp., Lucas Co. Louis W. Campbell. Green Twp., Ross Co. Floyd Bartley.
694. *Radicula hispida* (Desv.) Britt. Hispid Yellow-cress. Spencer Twp., Lucas Co. Louis W. Campbell.
700. *Lepidium draba* L. Hoary Peppergrass. Columbus, Franklin Co. C. J. Willard.
- 701.1. *Lepidium perfoliatum* L. Perfoliate Peppergrass. "In a small pasture lot," Hillsboro, Highland Co. Katie M. Roads.

703. *Thlaspi arvense* L. Field Penny-cress. Lucas Co. L. W. Campbell.
 706. *Sophia pinnata* (Walt.) Howell. Pinnate Tansy-mustard. New Vienna, Clinton Co. Katie M. Roads.
 708. *Cheirinia cheiranthoides* (L.) Link. Worm-seed Mustard. Amanda Twp., Fairfield Co. Floyd Bartley and Leslie L. Pontius.
 708.1. *Cheirinia inconspicua* (Wats.) Britt. Prairie Cheirinia. From the west. Milford, Clermont Co. "Alluvial soil, cornfields." E. Lucy Braun.
 709. *Cheirinia repanda* (L.) Link. Repand cheirinia. Washington Court House, Fayette Co. C. J. Willard.
 716. *Arabidopsis thaliana* (L.) Britt. Mouse-ear Cress. Harrison Twp., Ross Co. Floyd Bartley.
 753. *Cakile edentula* (Bigel.) Hook. Sea Rocket. Toledo, Lucas Co. R. T. Wareham.
 754. *Polonisia graveolens* Raf. Clammy-weed. Little Cedar Point, Jerusalem Twp., Lucas Co. Louis W. Campbell; Toledo, Lucas Co. R. T. Wareham.
 774.1. *Linum striatum* Walt. Ridged Flax. "Growing in a bog." Liberty Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
 807. *Dicrophyllum marginatum* (Pursh) K. & G. Snow-on-the-mountain. A waif in Columbus, Franklin Co. John H. Schaffner. "A common escape in Twin Twp." Preble Co. Lawrence E. Hicks.
 812. *Chamaesyce polygonifolia* (L.) Small. Knotweed Spurge. Toledo, Lucas Co. R. T. Wareham.
 814. *Callitriche austini* Engelm. Terrestrial Water-starwort. Rock House, Hocking Co., "Cabin Cove," Jackson Twp. Franklin Co. R. B. Gordon.
 815. *Callitriche palustris* L. Vernal Water-starwort. Delaware, Delaware Co. Glenn W. Blaydes.
 827. *Napaea dioica* L. Glade-mallow. Prospect, Marion Co. E. N. Transeau.
 829. *Hibiscus moscheutos* L. Swamp Rose-mallow. Stage's Pond near Ashville, Pickaway Co. Flowers white to pink and also sulphur yellow. Lloyd M. Shupe, Liberty Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
 830. *Hibiscus militaris* Cav. Halberd-leaf Rose-mallow. Prospect, Marion Co. E. N. Transeau. Calamus pond, Wayne Twp., Pickaway Co. Leslie L. Pontius and Floyd Bartley. Sims Creek, Village of Gallia, Gallia Co. W. H. Camp.
 840. *Hypericum cistifolium* L. Round-podded St. John's-wort. North Union and Colerain Twps., Ross Co. Floyd Bartley and Leslie L. Pontius.
 848. *Hypericum drummondii* (Grev. & Hook.) T. & G. Drummond's St. John's-wort. Near Barnesville, Belmont Co. Collected by Emma E. Laughlin. Huntington Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
 849. *Sarothra gentianoides* L. Orange-grass. Springfield Twp., Lucas Co. Louis W. Campbell. Jackson, Jackson Co. W. G. Stover.
 850. *Triadenum virginicum* (L.) Raf. Marsh St. John's-wort. Amanda Twp., Fairfield Co. Floyd Bartley and Leslie L. Pontius.
 853.1. *Hudsonia tomentosa* Nutt. Woolly Hudsonia. "A few plants growing in a sandy area near the Indiana-Ohio boundary line." Southwest of Montpelier, Williams Co. Lawrence E. Hicks.
 874. *Viola lanceolata* L. Lanceleaf Violet. Springfield Twp., Lucas Co. Louis W. Campbell.
 884. *Viola sagittata* Ait. Arrowleaf Violet. Cantwell Cliff, Hocking Co. Floyd Bartley.
 908. *Lychnis alba* Mill. White Lychnis. Clinton Twp., Franklin Co. and Shelby, Richland Co. R. A. Wareham. Also Columbus, Franklin Co. L. E. Hicks.
 912. *Silene latifolia* (Mill.) Britt. & Rendle. Bladder Campion. Kellogsville, Ashtabula Co. Lawrence E. Hicks.
 920.1. *Silene wherryi* Small. Wherry's Catchfly. Mifflin Twp., (1½ mi. east of Sinking Spring), Pike Co. E. T. Wherry. Transfer the record of *Silene caroliniana* Walt. from Fort Hill, Highland Co., collected by Katie M. Roads in 1925 to this new species also. Along with other characters this new species can be distinguished from *Silene caroliniana* by its calyx

- equaling the petal claws and being densely covered with pilose non-glandular hairs and by the style which is about as long as the ovulary.
923. *Vacaria vacaria* (L.) Britt. Cowherb. Benton Twp., Ottawa Co. Louis W. Campbell.
925. *Dianthus armeria* L. Deftford Pink. Howard, Knox Co. Lawrence E. Hicks.
933. *Allionia nyclaginea* Mx. Heart-leaf Umbrella-wort. Toboso, Licking Co. John H. Schaffner.
952. *Chenopodium leptophyllum* (Moq.) Nutt. Narrowleaf Goosefoot. Hillsboro, Highland Co. Katie M. Roads.
976. *Pleuropterus zuccarinii* Small. Japanese Knotweed. "Found in two localities near Camden, Preble Co." Lawrence E. Hicks.
980. *Tracaulon arifolium* (L.) Raf. Halberd-leaf. Tear-thum. Liberty Twp., Ross Co. Leslie L. Pontius and Floyd Bartley.
992. *Persicaria orientalis* (L.) Spach. Prince's-feather. Gratis, Preble Co. Lawrence E. Hicks.
1006. *Dasiphora fruticosa* (L.) Rydb. Shrubby Cinquefoil. North Union Twp., Ross Co. Floyd Bartley and Leslie L. Pontius. Silver Lake, near New Carlisle, Clark Co. John H. Schaffner.
1009. *Potentilla recta* L. Upright Cinquefoil. West of Chillicothe, Ross Co. Floyd Bartley and Leslie L. Pontius.
1030. *Rubus odoratus* L. Rose-flowered Raspberry. Paint Creek Gorge. Ross Co. Floyd Bartley and Leslie L. Pontius.
1034. *Filipendula rubra* (Hill.) Rob. Queen-of-the-prairie. North Union Twp., Ross Co. Floyd Bartley and Leslie L. Pontius. Bushville, Ashtabula Co. Lawrence E. Hicks.
- 1034.1. *Filipendula ulmaria* (L.) Maxim. Meadow-queen. From Europe. "Escaped from cultivation along roadside near Kellogsville, Ashtabula Co." Lawrence E. Hicks.
1104. *Baptisia leucantha* T. & G. Large White False-indigo. Madison Twp., Fairfield Co. E. S. Thomas, L. E. Hicks, and C. F. Walker.
1106. *Lupinus perennis* L. Wild Lupine. Springfield Twp., Lucas Co. Louis W. Campbell.
1112. *Trifolium agrarium* L. Yellow Hop Clover. Scioto Furnace, Scioto Co. Conrad Roth.
1113. *Trifolium procumbens* L. Low Hop Clover. Hillsboro, Highland Co. Katie M. Roads. Also "Swamp woods," Delaware, Delaware Co. G. W. Blaydes.
1116. *Trifolium arvense* L. Rabbit-foot Clover. Hillsboro, Highland Co. Katie M. Roads.
1118. *Trifolium reflexum* L. Buffalo Clover. On "Devil's Back Bone," Washington Twp., Pickaway Co. Leslie L. Pontius.
1157. *Lespedeza virginica* (L.) Britt. Slender Bush-clover. Colerain Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
- 1161.1. *Vicia villosa* Roth. Hairy Vetch. Hillsboro, Highland Co. Katie M. Roads.
1166. *Vicia sativa* L. Common Vetch. Hillsboro, Highland Co. Katie M. Roads.
1170. *Lathyrus palustris* L. Marsh Pea. Prairie Twp., Franklin Co. R. B. Gordon.
- 1173.1. *Lathyrus latifolius* L. Everlasting Pea. "Along railroad near Geneva," Ashtabula Co. Lawrence E. Hicks.
1187. *Micranthes pennsylvanica* (L.) Haw. Pennsylvania Saxifrage. Delaware, Delaware Co. Glenn W. Blaydes. Liberty Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1189. *Sullivantia sullivantii* (T. & G.) Britt. Sullivantia. Near Byington, Mifflin Twp., Pike Co. Reported by E. S. Thomas.
1190. *Tiarella cordifolia* L. False Mitrewort. East Pike Run, Hocking Co. Floyd Bartley. Also Mechanicsburg, Champaign Co. Chas. B. Wing.
1201. *Dirca palustris* L. Leatherwood. Growing with *Arbor vitae* at Cedar Falls, Adams Co. E. F. McCarthy and R. B. Gordon.
1204. *Rhamnus lanceolata* Pursh. Lanceleaf Buckthorn. Greer, Knox Co. R. B. Gordon. Springfield Twp., Ross Co. Floyd Bartley.

1207. *Ceanothus americanus* L. Common New Jersey Tea. Springfield Twp., Lucas Co. Louis W. Campbell.
1214. *Ampelopsis cordata* Mx. Heartleaf Ampelopsis. Crown City, Gallia Co. W. H. Camp.
1219. *Euonymus americanus* L. American Strawberry-bush. White's Gulch, Liberty Twp., Jackson Co. Leslie L. Pontius and Floyd Bartley.
1239. *Toxicodendron vernix* (L.) Ktz. Poison Sumac. Cedar Swamp, Champaign Co. Glenn W. Blaydes. Liberty Twp., Ross Co.; Amanda Twp., Fairfield Co. Floyd Bartley and Leslie L. Pontius. "In swamp along Kokosing R., 2 miles north of Fredericktown," Knox Co. Lawrence E. Hicks.
1254. *Cannabis sativa* L. Hemp. "Common for about a mile in pasture fields along Twin Creek," Lanier Twp., Preble Co. Lawrence E. Hicks.
- 1285.1. *Alnus alnus* (L.) Britt. European Alder. "Escaped from cultivation along stream; trees of various size." Minerva Park, Franklin Co. R. B. Gordon and F. M. Chapman.
1324. *Philadelphus coronarius* L. Garden Mock-orange. Hillsboro, Highland Co. Katie M. Roads.
1338. *Epilobium lineare* Muhl. Linear-leaf Willow-herb. Liberty Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1348. *Hartmannia speciosa* (Nutt.) Small. White Evening-primrose. St. Marys, Auglaize County. Wm. Kayser. Accidental in Columbus, Franklin Co. Glenn W. Blaydes.
- 1358 a. *Cucurbita pepo ovifera* Bail. Yellow-flowered Gourd. "A large number of plants found growing along west bank of Twin Creek, 2 mi. south of West Alexandria," Preble Co. Lawrence E. Hicks.
1399. *Chamaedaphne calyculata* (L.) Moench. Leather-leaf. "In small Sphagnum bog Nesmith Lake, Summit Co. East of Richmond Center, Ashtabula Co. Lawrence E. Hicks.
1401. *Oxydendrum arboreum* (L.) DC. Sorrel-tree. Paint Creek Gorge, Ross Co. Floyd Bartley and Leslie L. Pontius.
1402. *Epigaea repens* L. Trailing Arbutus. Harrison Twp., Ross Co. Floyd Bartley.
1403. *Gaultheria procumbens* L. Creeping Wintergreen. Harrison Twp., Ross Co. Floyd Bartley.
1410. *Vaccinium atrococcum* (Gr.) Heller. Dark Blueberry. "In bog, terminal moraine." Beach City, Sugar Creek Twp., Stark Co. W. H. Camp.
- 1415.2. *Halesia carolina* L. Silver-bell. Porter Twp., Scioto Co. Conrad Roth.
1418. *Phlox ovata* L. Mountain Phlox. Springfield Twp., Lucas Co. Louis W. Campbell.
1422. *Phlox stolonifera* Sims. Creeping Phlox. Ofer Falls, Coal Twp., Jackson County. Floyd Bartley.
1423. *Phlox subulata* L. Mr. Edgar T. Wherry studied our species of Phlox in April and has recently published a revision of this species dividing our material into two new varieties as given below. See *Bartonia* 11: 27, 1929. It would now be interesting to find the line across the state which separates the two varieties or regions in which the two might overlap.
- 1423.a. *Phlox subulata ciliata* Wherry. N. Var. Northern Ground Phlox. Defiance, Knox, Medina, Lorain, Cuyahoga, Portage, Lake.
- 1423.b. *Phlox subulata australis* Wherry. N. Var. Southern Ground Phlox. Harlem, Delaware Co. (E. T. Wherry), Franklin, Licking, Muskingum, Guernsey, Fairfield; Sinking Springs, Highland Co. (E. T. Wherry); Adams, Scioto, Lawrence.
1468. *Gentiana andrewsii* Griseb. Closed Gentian. Along Sims Creek, Village of Gallia, Gallia Co. W. H. Camp. More than 100 white-flowered specimens with no blue ones anywhere nearby. Jerusalem Twp., Lucas Co. Louis W. Campbell.
1472. *Obolaria virginica* L. Pennywort. Harrison Twp., Ross Co. Floyd Bartley.
1473. *Bartonia virginica* (L.) B. S. P. Yellow Bartonia. Higby Prairie, Ross Co. Floyd Bartley and Leslie L. Pontius.
1479. *Apocynum pubescens* R. Br. Velvet Dogbane. "On dry sandy hill," Beach City, Sugar Creek Twp., Stark Co. W. H. Camp.

1487. *Asclepias sullivantii* Engelm. Sullivant's Milkweed. Darby Twp., Pickaway Co. "Also seen in Fayette Co., two localities between Mt. Sterling and Washington Court House." E. S. Thomas and R. B. Gordon.
1493. *Asclepias verticillata* L. Whorled Milkweed. Liberty Twp., Jackson Co. Floyd Bartley and Leslie L. Pontius.
1515. *Solanum rostratum* Dunal. Columbus, Franklin Co. A rare weed. John H. Schaffner.
- 1517.1. *Verbascum phlomoides* L. Claspingleaf Mullen. Hamilton, Butler Co. From Europe. Mrs. Lulu Brand. (Braun Herbarium).
- 1521 a. *Chelone glabra linifolia* Coleman. Reported with half-tone habitat illustration from near Whitehouse, Lucas Co. in *Bartonia*, 1927-1928, p. 23. by F. W. Pennell and E. T. Wherry.
1529. *Conoclea multifida* (Mx.) Benth. Conoclea. On limestone. "The Point," Paint Twp., Ross Co. E. S. Thomas and R. B. Gordon. Also north Union Twp. and Springfield Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1535. *Veronica anagallis-aquatica* L. Water Speedwell. North Union Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1552. *Aureolaria pedicularia* (L.) Benth. Fernleaf False Foxglove. Springfield Twp., Lucas Co. Louis W. Campbell.
1555. *Aureolaria flava* (L.) Farw. Smooth False Foxglove. Springfield Twp., Lucas Co. Louis W. Campbell.

According to F. W. Pennell's treatment our species of *Agalinis* are as follows:

1556. *Agalinis purpurea* (L.) Pennell. Large Purple Agalinis. Rather General.
1557. *Agalinis paupercula* (Gr.) Britt. Small Purple Agalinis. Erie, Ottawa, Lucas.
1558. *Agalinis tenuifolia* (Vahl.) Raf. Slender Agalinis. Lucas, Erie (Moseley), Fulton (Pennell), Stark, Wayne, Washington, Licking, Fairfield, Gallia, Adams.
- 1558a. *Agalinis tenuifolia macrophylla* (Benth.) Blake. Auglaize, Fulton, Lucas, Erie (Pennell), Ottawa (Pennell), Wood, Monroe, Mahoning (Pennell), Belmont, Franklin, Madison, Fairfield (Pennell), Champaign (Pennell), Hocking, Clark, Greene, Clermont, Montgomery, Miami, Hamilton (Pennell).
- 1558b. *Agalinis tenuifolia parviflora* (Nutt.) Pennell. Erie Co. (Pennell).
1559. *Agalinis skinneriana* (Wood) Britt. Skinner's Agalinis. Wood Co.
1561. *Castilleja coccinea* (L.) Spreng. Scarlet Painted-cup. "Very plentiful at place where found; several acres covered with it." On state route 56, between Ash Cave and Hue, Benton Twp., Hocking Co. E. A. Albaugh. Ash Cave, Hocking Co. Kenneth Wright. Greer, Knox Co. R. B. Gordon. Springfield Twp., Lucas Co. Louis W. Campbell.
- 1579.1. *Catalpa ovata* Don. Japanese Catalpa. Head of Pine Run, Ashland Co. Several trees apparently growing wild among white pines in stream bottom." Lawrence E. Hicks.
1583. *Utricularia intermedia* Hayne. Flatleaf Bladderwort. Cedar Swamp, Champaign Co. Lawrence E. Hicks and Edward S. Thomas.
1598. *Myosotis virginica* (L.) B. S. P. Virginia Forget-me-not. Greer, Knox Co. R. B. Gordon.
- 1598.1. *Anchusa azurea* Mill. (*A. italica* Retz.). Azure Anchusa. Escaped in woods. From Europe. Wapakoneta, Auglaize Co. Wm. Kayser.
1607. *Echium vulgare* L. Blueweed. Conneaut, Ashtabula Co. Lawrence E. Hicks.
1616. *Trichostema dichotomum* L. Blue-curls. Flint Ridge, Hopewell Twp., Licking Co. Abundant in abandoned field. John H. Schaffner.
1627. *Scutellaria integrifolia* L. Hyssop Skullcap. Queer Creek, Hocking Co. Floyd Bartley and Leslie L. Pontius.
1638. *Clinopodium glabrum* (Nutt.) Ktze. Low Calamint. "Abundant on limestone." "The Point," Paint Twp., Ross Co. E. S. Thomas and R. B. Gordon.
1661. *Perilla frutescens* (L.) Britt. Perilla. "Abundant escape in many sections of Twin Twp.," Preble Co. Lawrence E. Hicks.

- 1663.1. *Meehania cordata* (Nutt.) Britt. Meehania. Blue Creek, Hocking Co. Floyd Bartley. Abundant near Ash Cave, Hocking Co. Lawrence E. Hicks and E. S. Thomas.
1672. *Lamium purpureum* L. Red Henbit. Concord Twp., Delaware Co. John H. Schaffner.
1696. *Plantago virginica* L. Dwarf Plantain. Gibsonville, Hocking Co. Chas. Ziegler. "Neotoma," Good Hope Twp., Hocking Co. E. S. Thomas.
1698. *Aralia spinosa* L. Angelica-tree. Twin Twp., Preble Co.; also in Lanier Twp. "Several thickets in western Monroe Twp.," Ashtabula Co. Lawrence E. Hicks.
1700. *Aralia nudicaulis* L. Wild Sarsaparilla. Springfield Twp., Ross Co., also in Harrison Twp., Ross Co. Floyd Bartley.
1704. *Eryngium aquaticum* L. Rattlesnake Master. Lynx P. O., Adams Co. Arthur R. Harper. Big Island Twp., Marion Co. E. N. Transeau. Monclova Twp., Lucas Co. L. W. Campbell and M. R. Van Cleave. Also Lucas Co. R. A. Schaller.
1752. *Houstonia purpurea* L. Large Houstonia. Paint Creek Gorge, Ross Co. Floyd Bartley and Leslie L. Pontius.
1753. *Houstonia ciliolata* Torr. Fringed Houstonia. Harrison and Springfield Twps., Ross Co. Floyd Bartley.
1760. *Diodia teres* Walt. Rough Buttonweed. Toad Heaven Hollow, Jackson Co. Floyd Bartley and Leslie L. Pontius.
- 1760.1. *Galium verum* L. Yellow Bedstraw. Circleville Twp., Pickaway Co. Floyd Bartley.
1766. *Galium mollugo* L. White Bedstraw. Jackson Twp., Pickaway Co. Floyd Bartley.
1777. *Viburnum dentatum* L. Toothed Arrow-wood. "Dry prairie on a steep clay bank." Big Darby Creek, Franklin Co. Edward S. Thomas. Also near Walhonding, Coshocton Co. C. F. Walker.
1779. *Viburnum cassinoides* L. Withe-rod. Ofer Hollow, Jackson Co. Leslie L. Pontius and Floyd Bartley.
- 1786.1. *Triosteum aurantiacum* Bickn. Scarlet-fruited Horse-gentian. Liberty Twp., Highland Co. Katie M. Roads.
1799. *Lonicera sullivanii* Gr. Sullivan's Honeysuckle. River Drive, Delaware, Delaware Co. Glenn W. Blaydes.
1802. *Dierilla diervilla* (L.) MacM. Brush-honeysuckle. Abundant. Colerain Tp., Ross Co. Floyd Bartley and Leslie L. Pontius. Walhonding, Coshocton Co. Lawrence E. Hicks.
1812. *Campanula rotundifolia* L. Harebell. "On limestone at 'The Point,' where Paint Creek joins the preglacial channel." Paint Twp., Ross Co. E. S. Thomas and R. B. Gordon.
1835. *Rudbeckia speciosa* Wend. Showy cone-flower. Wayne and Washington Twps., Pickaway Co.; Colerain Twp., Ross Co. Leslie L. Pontius and Floyd Bartley.

REVISED LIST OF THE SPECIES OF HELIANTHUS.

1840. *Helianthus occidentalis* Ridd. Fewleaf Sunflower. Fulton, Erie, Franklin, Adams.
1841. *Helianthus microcephalus* T. & G. Small Wood Sunflower. Cuyahoga, Jackson.
- 1841.1. *Helianthus glaucus* Small. Glauous Sunflower. Belmont, Lake, Cuyahoga, Wayne, Richland, Fairfield, Ross, Miami, Montgomery, Hamilton.
1842. *Helianthus giganteus* L. Giant Sunflower. From Ottawa, Wayne, and Fairfield counties westward.
- 1842.1. *Helianthus altissimus* L. Tall Sunflower. Williams County.
1843. *Helianthus maximiliani* Schrad. Maximilian's Sunflower. Lake, Franklin, Champaign, Hamilton, Auglaize Co. (Wm. Kayser). From the West.
- 1843.1. *Helianthus dalyi* Britt. Daly's Sunflower. Huron county (Schaffner).
1844. *Helianthus grosse-serratus* Mart. Sawtooth Sunflower. Erie, Wood, Huron, Franklin, Madison.
- 1844.1. *Helianthus instabilis* Wats. Unstable Sunflower. Auglaize, Cuyahoga, Madison, Clark.

1845. *Helianthus kellermani* Britt. Kellerman's Sunflower. Franklin County (Kellerman).
1846. *Helianthus divaricatus* L. Woodland Sunflower. Rather general.
1847. *Helianthus mollis* Lam. Hairy Sunflower. Lake, Erie, Franklin.
1848. *Helianthus doronicoides* Lam. Oblong-leaf Sunflower. Erie (Moseley), Franklin (Sullivant).
1849. *Helianthus decapetalus* L. Thinleaf Sunflower. General.
1850. *Helianthus trachelifolius* Mill. Throatwort Sunflower. No specimens.
- 1850.1. *Helianthus brevifolius* Wats. Short-leaf Sunflower. Richmond, Lake County (Otto Hacker). Type. Painesville, Lake County (Hacker). Co-type.
1851. *Helianthus strumosus* L. Paleleaf Wood Sunflower. Madison, Defiance, Ottawa, Cuyahoga.
1852. *Helianthus hirsutus* Raf. Hirsute Sunflower. General.
1853. *Helianthus laetiflorus* Pers. Showy Sunflower. No specimens.
1854. *Helianthus tuberosus* L. Jerusalem Artichoke. General.
1855. *Helianthus annuus* L. Common Sunflower. General.
1856. *Helianthus petiolaris* Nutt. Prairie Sunflower. Lake, Huron, Belmont, Franklin Co. (Glenn W. Blaydes).
1859. *Coreopsis lanceolata* L. Lance-leaf Tickseed. Wapakoneta, Auglaize Co. Wm. Kayser.
1862. *Coreopsis verticillata* L. Whorled Tickseed. Silver Lake, near New Carlisle, Clark Co. John H. Schaffner.
1901. *Grindelia squarrosa* (Pursh.) Dun. Broad-leaf Gum-plant. Marysville, Union Co. Chas. Alspach.
1904. *Solidago squarrosa* Muhl. Stout Goldenrod. Rock Hill, Colerain Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1908. *Solidago hispida* Muhl. Hairy Goldenrod. Rock Hill, Colerain Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1909. *Solidago erecta* Pursh. Slender Goldenrod. Rock Hill, Colerain Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1910. *Solidago uliginosa* Nutt. Bog Goldenrod. Colerain Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1923. *Solidago ohioensis* Ridd. Ohio Goldenrod. Ira May Swamp, Wayne Twp., Pickaway Co.; North Union Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1924. *Solidago riddellii* Frank. Riddell's Goldenrod. Ira May Swamp, Wayne Twp., Pickaway Co. Floyd Bartley and Leslie L. Pontius.
1930. *Sericocarpus linifolius* (L.) B. S. P. Narrow-leaf Whitetop Aster. Shawnee State Forest, Scioto Co. Conrad Roth.
1942. *Aster phlogifolius* Muhl. Thinleaf Purple Aster. Rock Hill, Colerain Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1982. *Lacinaria scariosa* (L.) Hill. Large Blazing Star. "Red Hills Region," Central College, Franklin Co. R. B. Gordon and F. B. Chapman.
1983. *Lacinaria spicata* (L.) Ktz. Dense Blazing-star. North Union Twp., Ross Co.; Kibler's Bog, Circleville Twp., Pickaway Co. Floyd Bartley and Leslie L. Pontius.
1988. *Elephantopus carolinianus* Willd. Carolina Elephant's-foot. Crown City, Gallia Co. W. H. Camp.
1991. *Anthemis arvensis* L. Field Dog-fennel. Wapakoneta, Auglaize Co. Wm. Kayser.
1997. *Matricaria inodora* L. Scentless Camomile. "Several plants along railroad." Hillsboro, Highland Co. Katie M. Roads.
- 2006.1. *Artemisia absinthium* L. Common Wormwood. "Common escape in some sections of Twin Twp., Preble Co." From Europe. Lawrence E. Hicks.
2008. *Mesadenia reniformis* (Muhl.) Raf. Great Indian-plantain. Paint Creek Gorge, Ross Co. Floyd Bartley and Leslie L. Pontius. Also Mineral Springs, Adams Co. Specimen collected by W. A. Kellerman.
2010. *Mesadenia tuberosa* (Nutt.) Britt. North Union Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
2011. *Synosma suaveolens* (L.) Raf. Sweet-scented Indian-plantain. Wayne Twp., Pickaway Co. Leslie L. Pontius and Floyd Bartley.

2016. *Tussilago farfara* L. Coltsfoot. "A patch about five feet across, by the side of a road." Milan, Erie Co. S. Hawley. Ashtabula, Ashtabula Co. Also along Conneaut R. 6 miles from mouth. L. E. Hicks.
2023. *Cirsium virginianum* (L.) Mx. Virginia Thistle. Big Darby Creek, Franklin Co. E. S. Thomas.
- 2029.1. *Centaurea vochinensis* Bernh. Tyrol Star-thistle. Cantwell Cliffs, Hocking Co. Glenn W. Blaydes.
- 2029.2. *Centaurea nigra* L. Black Star-thistle. Beach City, Sugar Creek Twp., Stark Co. W. H. Camp.
- 2039.1. *Sonchus uliginosus* Bieb. Glandless Field Sow-thistle. Washington Twp., Pickaway Co. Leslie L. Pontius and Floyd Bartley.
2043. *Lactuca saligna* L. Willow Lettuce. Washington Twp., Pickaway Co. Leslie L. Pontius and Floyd Bartley.
2058. *Hieracium gronovii* L. Gronovius' Hawkweed. Springfield Twp., Lucas Co. Louis W. Campbell.